

Environmental and Social Data Sheet

Overview

Project Name: BUCHAREST S6 ENERGY EFFICIENCY
Project Number: 2016-0952
Country: Romania
Project Description: Financing of energy efficiency measures comprising thermal retrofit of existing public and residential buildings as well as construction of new schools as Near Zero Energy Buildings (NZEB) in Bucharest S6

EIA required: no

Project included in Carbon Footprint Exercise¹: yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

Environmental and Social Assessment

Environmental Assessment

The project aims at improving the thermal performance of public and residential buildings in Bucharest through thermal rehabilitation works and supporting the national energy efficiency action plan with the construction of public schools Near Zero Energy Buildings (NZEB). Depending on the type of intervention the reduction of the energy consumption ranges from 40% to 48%, resulting in reduced air pollution and reduced emission of greenhouse gases. The promoter, the municipality of Sector 6 of Bucharest, will undertake that post-construction and post-refurbishment, energy performance certificates will be issued for all buildings by independent accredited experts, according to the national legislation implementing the Energy Performance of Buildings Directive (2010/31/EU). The capacity of the promoter is deemed acceptable for the scale, nature and location of the projects.

At construction stage, the project implementation may lead to increased noise and vibration levels, and may impact air quality. Adequate mitigation measures will be implemented together with the enforcement of good construction practices. The promoter will implement and maintain a quality management system which aims to guarantee the quality of the construction.

The project's impact at construction stage will be temporary and reversible, at a level which is deemed acceptable.

¹ Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO₂e/year absolute (gross) or 20,000 tons CO₂e/year relative (net) – both increases and savings.

Luxembourg, 14.11.2017

EIB Carbon Footprint Exercise

The estimated overall energy savings are around 28 400 MWh per year of primary energy corresponding to 11 400 t of CO₂ equivalent per year.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

Social Assessment

No special social risks are anticipated for this project. Conversely, the project is expected to bring about considerable positive social benefits related to the gains in energy efficiency and associated decrease in the energy bill.

Conclusions and Recommendations

Overall, this operation is expected to have positive environmental and social impacts as it will support projects that reduce energy consumption in buildings. It will, therefore, reduce air pollution related to the production of heat (SO₂, NO_x and particulates) and will help mitigate climate change by avoiding associated CO₂ emissions. Through a proper management system and based on the experience of the previous two operations the promoter will ensure that the main negative limited impacts during construction will be adequately mitigated.

- The promoter will implement and maintain a quality management system which aims at guaranteeing construction quality.
- The promoter will ensure that after refurbishment energy performance certificates according to the national legislation implementing the EPBD will be issued for all buildings by independent accredited experts.
- The energy savings will be compiled and presented in a report to the Bank on an annual basis.
- For the buildings constructed as NZEB, an energy manager and energy management system should be in place to meter and follow up real energy consumption. Final energy simulations of the building will be conducted in line with the pre-committed NZEB levels.

Based on the above it is concluded that this operation is acceptable to the Bank from an environmental and social point of view.